What's all that stuff in itos/bin?

ITOS Edition

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What's all that stuff in itos/bin?

Device.conf A configuration file for the STOL set directive. See section "SET" in

STOL Directives.

allmnems Dumps telemetry mnemonic information from the operational

database.

archive_to_tape A work in progress.

cat_vers_files Concatenates a set or subset of versioned files into a single file.

cleanipc Removes all System V IPC structures from the system. ITOS cre-

ates a single System V semaphore set to guard some of it's database

structures.

cleanup Kills any lingering ITOS programs. Or, run cleanup -n to see what

the lingering ITOS programs are.

cmd_dump Started by STOL when a dump command is sent to the spacecraft. A

dump command is one which causes the spacecraft to dump a table or

memory region to the ground system.

cmd_load Gets started via STOL's load directive. See section "LOAD" in STOL

Directives.

cmd_transmit The output stage of the command subsystem. This program wraps

outgoing commands and transmits them to a front-end or ground sta-

tion.

compare A utility to compare a file with standard input.

copylog An indepenent application that connects to a running ITOS event han-

dler an writes the events to a file. This file can be closed at regular

intervals and a new file open.

cpioToCmdLoad Converts a binary file to a spacecraft load file in the SMEX format.

 ${\tt create_arch_hdr} \qquad \quad {\tt A \ utility \ to \ create \ headers \ for \ archive \ files \ lacking \ them.}$

dailydump A backup script.

dbxodb Constructs the ODB. See section "The dbxodb program" in Database

Exchange Records.

\$Date: 2006/09/27 21:29:13 \$

deviceDriver This program is involved with controlling IEEE-488 (GPIB) devices. dp_server The ITOS data point server. See section "dp_server" in The ITOS Data Point Server. dsp_cmdbuf The cmdbuf page program, which displays the command buffer for the active command virtual channel. $dsp_control$ The control page program, which displays all active pages, seqprts, plots, snaps, packet and frame dumps, and configuration monitors... dsp_evtdsp The event display program. dsp_evtlog The event logging program. dsp_evtprt The program for driving a line printer dedicated to events. dsp_mnepage The general telemetry page program. The general telemetry page snap program, which implements the STOL dsp_mnepage_snap 'snap' directive and the 'snap' page menu item for general telemetry pages. Parses telemetry page definitions for the Java applet that displays these dsp_page_parser over the web. dsp_pktcount The pktcount page program. This displays the count of packets received for each application ID in the database. dsp_pktdump The packet dump program, which implements the STOL 'pktdump' and 'tfdump' directives. dsp_plot The X/Motif plot program, which implements the STOL 'plot' direc dsp_remote This program is started by dsp_evtdsp to do interprocess communication. dsp_sentq The sentq page program, which displays the sent queue for the current command virtual channel. dsp_seqprt The sequential print program, which implements the STOL 'seqprt' directive. dsp_timeon The program which implements the STOL 'timeon' directive.

\$Date: 2006/09/27 21:29:13 \$

dump_odb Produces a report showing the contents of the ODB. Intended for de-

bugging the ODB.

dumpcmdgbl Dumps the 'CmdGbl' shared memory segment, which can be usefule

for debugging purposes.

eqn_cfgmon The equation processor and configuration monitor program, which im-

plements the STOL 'cfgmon' directive.

file_capture Extracts and concatenates transfer frame data fields from a transfer

frame stream, and writes them to a file or to a process through a pipe.

Used for capturing downlinked files on the Triana mission.

filterlog A batch application that operates on collections of log files and filters

their contents based on timestamp, event type, spacecraft time and

regular explressions.

filtersp Standalone tool for processing ITOS sequential print files. Its main

functions are sorting, removing redundant lines and identifying gaps in

data.

find-includes Programmer's utility. Searches a tree of directories to find which '.c'

or '.h' files reference specife '.h' files. I.e., helps find obsolete or unused

'.h' files.

findpage Searches for a page file in a directory tree; part of ITOS' ability to

display telemetry pages over the web.

fix_arch_hdrs Utility to update archive header files for a particular ITOS release.

flush Flushes a serial port's input and/or output queues.

fop The command subsystem's Frame Operations Procedure; gets started

via STOL's enable cmd directive. See section "ENABLE" in STOL

Directives.

fopmux Interfaces itos_stol and cmd_load to fop. Gets started with fop.

fp A script which runs a fast plot.

frame_sorter The telemetry ingest program. This program does telemetry distribu-

tion and archiving at the frame and packet level.

frame_source A test utility.

FrameSync Software frame synchronizer.

ftcp.conf An obsolete file.

gstol A GUI STOL tool that will allow most STOL directives to be invoked

throught the use of a point and click user interface..

hotkey Produces a hotkey report whenever de-iconified.

ibic A program for interacting with IEEE-488 devices.

invoked The invocation daemon, which an ITOS uses to execute ITOS applica-

tions on another ITOS computer.

itos The script for starting ITOS.

itosrc Configuration file that initializes the ITOS environment. '~/.itosrc'

overrides '~\${ITOS_GROUP}/tcwrc' and '~\${ITOS_GROUP}/tcwrc'

overrides 'itos/bin/itosrc'.

itosrun Runs its argument in the ITOS environment. For example, 'itosrun

mv_odb; itosrun load_env; itosrun stubstol' loads a database

and starts stubstol.

itos_ascii_tlm The ITOS ASCII telemetry processor. This program decodes ASCII

telemetry messages that consist of a keyword followed by zero or more data values. See section "itos_ascii_tlm" in ASCII Telemetry Processor.

itos_asist_swts_if The ASIST/SWTS Interface. This program enables commands and

telemetry to be exchanged between ITOS and an ASIST/SWTS sys-

tem. See section "itos_asist_swts_if" in ASIST/SWTS Interface.

itos_getevt This script can be used to start evtforward on a machine which is not

running ITOS. For example, this might be done on a web server to

make events available on the web.

dsp_limitview The ITOS Limit Viewer. This program lists mnemonics that have cur-

rent limit violations in a tabular display. See section "dsp_limitview"

in Limit Viewer.

itos_load_env Initializes global mnemonics in the ODB from the environment.

itos_runevt The script that starts the event subsystem.

itos_runijs The script that starts the server which starts Java-based displays.

itos_stol STOL, the primary user interface to the ITOS system. See section

"STOL" in The ITOS User's Guide.

itos_stubstol A debug version of STOL. Doesn't actually do very much, but might

be useful for syntax checking procs or checking the ODB.

itos_syncheck The STOL syntax checker.

itos_system A shell script invoked by STOL when a "system" directive is executed

to set up the environment to redirect stdout and stderr back to the

STOL events handler.

itos_term An application written for the Triana mission that provides a terminal-

like interface to the VxWorks shell running on the spacecraft.

leditor The load editor, which may be used for creating, viewing, and modi-

fying spacecraft command and table loads.

make_cpio_stream Test program.

make_load_file This is a filter whose input is data to be loaded onto a spacecraft and

whose output is an ITOS raw image load file. Each byte of input gets

written as its two character hexadecimal equivalent.

makepage The script that starts the graphical display editor for Java-based dis-

plays.

mkodb A script for running dbxodb.

mv_odb Loads a new ODB.

pkt_sync A test tool that lists CCSDS packets in a file.

pktfileter A utility for intentionally distorting telemetry for "mystery sims".

pktsink A test program that counts the number of packets in an input stream

and reports syncs found and at what interval.

plot A shell script that run Java program ShowPlot.

plotfile A shell script that run Java program FilePlot.

prt An obsolete shell script not longer used.

relay A program that relays it's standard in to a socket and data from the

socket to standard out. It's run by inetd to do command relays to

ITOS I&T clusters.

repack A utility program which can repackage an frame archive, removing file

and frame headers and trailers.

runtape A script for starting the Metrum tape controller program.

scSimulator The ITOS command simulator. This is started by enable cmd, sim

and instantiates the CCSDS FARM for testing the ITOS command

system.

selectpage A script for running the application that lets users select pages over

the web.

setmnemonic This program is designed for use by the telemetry controller to set

GBL_ACQUIRE. It sets the given mnemonic to the given value, but

only works for string mnemonics.

showpage Run ShowBeanBox as an application.

smpx_histdump A utility specific to the SAMPEX mission. This program is part of

the processing required to process instrument history packets received from SAMPEX spacecraft. Files are telemetered in dump packets in a stream. This program decoms the data in the packet and creates sequential print like ascii files for each of the 5 subsystems for a total

of 19 files.

sockrw Utility for testing socket I/O. Can act like a daemon and wait for a

client connection.

sp201_check This program pretty-prints data files created by sp201_format so that

they may be read and checked for consistency.

sp201_format This reformats Spartan 201 flight data into files in the format previ-

ously used to create 9-track data tapes.

sync A utility to find CCSDS frame sync markers in a file and print infor-

mation from the following frame header.

sync_scat_gmt Used by STOL's date directive when syncing to a SCAT. See section

"DATE" in STOL Directives.

taperecorder The program for controlling the Metrum tape recorder. This is not

available on most platforms.

thermal_gse Read real-time tabular data and assign the values to telemetry

mnemonics. Written to support putting GSFC thermal GSE data into

the ITOS current value table.

tlmClcw Processes the command link control word (CLCW).

tlmClient The telemetry unpacker.

tlmFrmSim The telemetry simulator.

tlmPlay The archive playback program.

tlmPlayGui The archive playback graphical user interface.

tlmStatic Detects when telemetry goes static while the telemetry subsystem is

connected to a data source. Gets started via STOL's enable tlm di-

rective. See section "ENABLE" in STOL Directives.

tlmSyncFtcpGmt Used by STOL's date directive when syncing to an FTCP. See section

"DATE" in STOL Directives.

tmController The telemetry controller, responsible for starting and controlling

frame_sorters, tlmClients, etc.

uosat12 A UOSAT mission specific decom program used to bypass normal

telemetry ingestion to get UDP packets of UOSAT data and put them

directly into the current value tables.

verifyImage A program to compare spacecraft loads and dumps to verify that a

load was successful.

weeklydump A backup script.

xraisewin Raises an X window to the top of the stacking order.